

REMARKS

Entry of the amended claims and favorable reconsideration and reexamination of the subject application, as amended, and in light of the remarks which follow, are respectfully requested.

By the present amendment, the claims 10, 15, 22, 28, 33, 46, 49, 52 and 53 have been amended. Claims 25, 26 and 35 have been cancelled. Support for the introduction of "gradually increasing" in claims 10 and 28 appear, at least, in previously presented claims 24 and 35. Support for the addition of the amounts of nicotine and L-DOPA appear at least on page 4, lines 1 to 8 of the application as filed. Applicants submit that no new matter has been added via this amendment.

Claims 15 and 18 to 27 have been rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention.

Claim 15 has been amended to specify the dosage of nicotine or nicotine derivative as well as L-DOPA. Consequently, claims 18 to 27, directly or indirectly dependent on claim 15, are similarly amended. Therefore, withdrawal of this rejection is respectfully requested.

Claims 10, 12 to 14 and 55 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

In rendering this rejection, the Examiner deems that the term "progressive" is indefinite in claims 10 and 55. Claims 10 and 55 have been amended to delete the term "progressive," and replace it with the clarifying terminology "which increase over three consecutive months followed by stabilized doses after three months." Support for this amendment can be found at least on page 4, lines 26 to 30 of the specification as filed. Therefore, withdrawal of this rejection is respectfully requested.

Claims 10, 12, 15, 18, 19, 22 to 28, 33 to 35, 38, 39, 41, 44 to 46 and 49 to 53 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Domino et al.* or Applicants' admissions. For the following reasons, this rejection is respectfully traversed.

In rendering this rejection, the Examiner purports that it would be obvious for a person skilled in the art to determine the optimum amounts when the prior art discloses combining two or three compounds, each of which was known in the art to treat the same conditions. However, Applicants disagree with the Examiner for the following reasons.

It should be emphasized that there is no teaching or even suggestion in *Domino et al.* to reduce the amount of L-DOPA which was administered to monkeys with nicotine. In fact, the L-DOPA that was administered to the monkeys in *Domino et al.* was that dose which was in fact known to work when administered alone.

As set forth in various past responses, the presently claimed invention recites that the L-DOPA is administered in the recited combination of components at a level that is 30% lower than the dosage of L-DOPA when administered alone. Even though a lower dosage would in fact reduce the side effects caused by L-DOPA, a skilled artisan would also conclude that such a reduction in L-DOPA dosage would, in fact, also increase the symptoms of the disease which L-DOPA treats, such as akinesia and postural balance. In contrast, this is not the case with the present invention.

As set forth in the accompanying 37 C.F.R. § 1.132 Declaration, the dosages of nicotine and L-DOPA administered to patients with Parkinson's disease, as currently claimed in the present invention, resulted in unexpected improvements in the symptoms of Parkinson's disease. Dyskinesia and dystonia completely disappeared for the first time in patients treated with the present invention, but not when previously treated with

the classical L-DOPA treatment. Improvements in arm tremor, rigidity, gait and speech were shown using the dosages of the presently claimed invention. Improvement in urinary and sexual functions, as well as mood and memory, were also observed. In contrast, the classical treatment of L-DOPA did not show such improvements.

Furthermore, the Declaration also points out that the DATscan results revealed that, unlike the classical L-DOPA treatment for Parkinson's disease, the currently claimed treatment showed an increase in D1 and D2 presynaptic dopaminergic receptors in the nigrostriatum zone. Hence, the presently claimed administration of the combination of nicotine or a nicotine derivative with a lower amount of L-DOPA appears not only to relieve major symptoms of Parkinson's disease, but also to aid in the treatment of Parkinson's disease itself.

Thus, Applicants submit that the treatment of the presently claimed invention shows unexpected results and hence is unobvious in view of the cited prior art.

Withdrawal of this rejection is therefore respectfully requested.

Claims 13, 21, 31-32 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Domino et al.* and further in view of Medline AN 86017126 (*Lieberman*). For the following reasons, this rejection is respectfully traversed.

Applicants submit that the § 1.132 Declaration shows that unexpected results were achieved using the dosages as claimed in the present invention; the *Lieberman* reference does not cure these deficiencies. Therefore, for the same reasons as set forth above, withdrawal of this rejection is respectfully requested.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that she telephone Applicants' attorney at (908) 654-5000 in order to overcome any additional objections which she might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: February 17, 2004

Respectfully submitted,

By 

Harvey L. Cohen

Registration No.: 28,365

LERNER, DAVID, LITTENBERG,

KRUMHOLZ & MENTLIK, LLP

600 South Avenue West

Westfield, New Jersey 07090

(908) 654-5000

Attorney for Applicant